

Claims

1. A packaging cell comprising a first, second, and third nucleic acid
5 constructs which regulate expression of one or more than one viral gene product
necessary for packaging a viral vector wherein

said first nucleic construct is capable of expressing an encoded first product;

10 said first product is capable of regulating expression of a second product encoded
on said second nucleic acid construct; and

15 said second product is capable of regulating expression of said viral gene product,
which is encoded by a sequence present on said third nucleic acid construct.

2. The cell of claim 1 wherein said first nucleic acid construct comprises a
tetracycline regulated promoter/operator.

3. The cell of claim 1 wherein said first product is a transactivator of a
20 tetracycline regulated promoter/operator or a fusion protein comprising said
transactivator.

4. The cell of claim 1 wherein said second nucleic acid construct comprises a
tetracycline regulated promoter/operator.

25 5. The cell of claim 1 wherein said second product is a rev protein.

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6. The cell of claim 1 wherein said third construct comprises a promoter derived from a retroviral 5' LTR.
7. The cell of claim 1 wherein said viral gene product is a viral envelope or 5 G protein.
8. The cell of claim 7 further comprising an additional nucleic acid construct that encodes retroviral gag and pol proteins.
- 10 9. The cell of claim 1 wherein said first product is tat protein or a chimeric protein comprising a tat protein.
10. The cell of claim 7 wherein said viral gene product is a G protein.
- 15 11. The cell of claim 1 which is stably transfected with said nucleic acid constructs.
12. The cell of claim 1 further comprising a conditionally replicating viral vector and wherein said cell packages said vector.
- 20 13. The cell of claim 12 wherein said vector is derived from HIV-1.
14. The cell of claim 13 wherein said G protein is a VSV or Mokola virus G protein.
- 25 15. A method of packaging a viral vector comprising culturing the cell of claim 13 under conditions wherein said first nucleic acid construct expresses said first product.